

Math (Science)	Group-I	Paper-I
Time: 20 Minutes	(Objective Type)	Max. Marks: 15

**Note:** Four possible answers, A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink. Cutting or filling two or more circles will result in zero mark in that question.

- 1-(i) The order of matrix  $\begin{bmatrix} 2 & 1 \end{bmatrix}$  is:  
 (a) 2-by-1 (b) 1-by-2 ✓  
 (c) 1-by-1 (d) 2-by-2
- (ii) Imaginary part of  $-i(3i + 2)$  is -----.  
 (a)  $-2$  ✓ (b) 2  
 (c) 3 (d)  $-3$
- (iii)  $\log p - \log q$  is same as -----.  
 (a)  $\log\left(\frac{p}{q}\right)$  ✓ (b)  $\log(p - q)$   
 (c)  $\frac{\log p}{\log q}$  (d)  $\log\left(\frac{q}{p}\right)$
- (iv)  $(\sqrt{a} + \sqrt{b})(\sqrt{a} - \sqrt{b})$  is equal to:  
 (a)  $a^2 + b^2$  (b)  $a^2 - b^2$   
 (c)  $a - b$  ✓ (d)  $a + b$
- (v) The factors of  $x^2 - 5x + 6$  are:  
 (a)  $(x + 1)(x - 6)$  (b)  $(x - 2)(x - 3)$  ✓  
 (c)  $(x + 6)(x - 1)$  (d)  $(x + 2)(x + 3)$
- (vi) H.C.F of  $p^3q - pq^3$  and  $p^5q^2 - p^2q^5$  is:  
 (a)  $pq(p^2 - q^2)$  (b)  $pq(p - q)$  ✓  
 (c)  $p^2q^2(p - q)$  (d)  $pq(p^3 - q^3)$
- (vii) Which is the solution of inequality  $3 - 4x \leq 11$ :  
 (a)  $-8$  (b)  $-2$  ✓  
 (c)  $-\frac{14}{4}$  (d) None of these



- (a) 0 (b) 1  
(c) 2 (d)  $\sqrt{2}$  ✓
- (x) In a triangle, there can be only one ---- .  
(a) Right angle ✓  
(b) Acute angle  
(c) Supplementary angle  
(d) None of these
- (xi) In a parallelogram, opposite sides are --- .  
(a) Congruent ✓ (b) Opposite  
(c) Not equal (d) None of these
- (xii) Bisection means to divide into --- equal parts.  
(a) Two ✓ (b) Three  
(c) Four (d) Five
- (xiii) Ratio has ---- unit.  
(a) One (b) Two  
(c) Three (d) None of these
- (xiv) Congruent figures have ---- area.  
(a) Same ✓ (b) Different  
(c) Parallel (d) None of these
- (xv) The diagonals of a parallelogram ---- each other.  
(a) Bisect ✓  
(b) Trisect  
(c) Bisect at right angle  
(d) None of these